OBJECTIVE TYPE QUESTIONS

[1 Mark]

Multiple Choice Questions

1. Is Python case sensitive when dealing with identifiers ?
   (a) yes
   (b) no
   (c) machine dependent
   (d) none of the mentioned

2. Which of the following is an invalid variable ?
   (a) my_day_2   (b) 2nd_day   (c) Day_two   (d) _2

3. Which of the following is not a keyword ?
   (a) eval   (b) assert   (c) nonlocal   (d) pass

4. Which of the following is an invalid statement ?
   (a) abc = 1,000,000
   (b) a b c = 1000 2000 3000
   (c) a, b, c = 1000, 2000, 3000
   (d) a = b = c = 1,000,000

5. Which of the following cannot be a variable ?
   (a) __init__   (b) in   (c) it   (d) on

6. Which of these is not a core data type ?
   (a) Lists   (b) Dictionary   (c) Tuples   (d) Class

7. Given a function that does not return any value, what value is thrown by default when executed in shell ?
   (a) int   (b) bool   (c) void   (d) none

8. Following set of commands is executed in shell, what will be the output ?
   ```
   >>>str = "hello"
   >>>str[:2]
   >>>
   ```
   (a) he   (b) lo   (c) olleh   (d) hello

9. In Python we do not specify types, it is directly interpreted by the compiler, so consider the following operation to be performed.

   >>> x = 33 <operator > 4

   What would you fill in place of <operator> in above expression so that x has an integer value ? Select all that apply (Python 3.xx)

   (a) //   (b) /

   (c) %   (d) All of the mentioned

10. Which type of error occurs when you execute the following code fragments ?

   (a) SyntaxError   (b) NameError   (c) ValueError   (d) TypeError

   [For your reference :

SyntaxError :	Occurs when some Python language rules are violated.
NameError :	Occurs when Python tries to use a variable or function name, which is not defined before.
ValueError :	Occurs when the content of the object being assigned is not of required data type.
TypeError :	Occurs when there is attempt to call a function or use an operator on something of the incorrect type.]

   (i)   >>> fruit1 = apple

   (ii)   >>> 1 = 6

   (iii)   >>> 'abc' + 4 - 4

   (iv)   >>> a1 = 2
                    >>> a12 + 1

   (v)   >>> int('11.23')

11. Carefully observe the code and give the answer.

```
def function1(a):
    a = a + '1'
        a = a * 2
>>>function1("hello")
```

   (a) indentation Error   (b) cannot perform mathematical operation on strings

   (c) hello2   (d) hello2hello2

12. What data type is the object below ?

   L = [1, 23, 'hello', 1]

   (a) list   (b) dictionary   (c) array   (d) tuple

13. What data type is the object below ?

   L = 1, 23, 'hello', 1

   (a) list   (b) dictionary   (c) array   (d) tuple

14. To store values in terms of key and value, what core data type does Python provide ?

    (a) list   (b) tuple

    (c) class   (d) dictionary

15. Which of the following statements will print the following ?

       hello-how-are-you

    (a)   print('hello', 'how', 'are', 'you')

    (b)   print('hello', 'how', 'are', 'you' + '-' * 4)

    (c)   print('hello-' + 'how-are-you')

    (d)   print('hello' + '-' + 'how' + '-' + 'are' + '-' + 'you')

16. How would you write x^y in Python as an expression ?

    (a) x^y   (b) x**y

    (c) x^^y   (d) none of the mentioned

17. Which one of these is floor division operator ?

    (a) /   (b) //

    (c) %   (d) None of the mentioned

18. What is the value of this expression: 22 % 3 is ?

    (a) 7   (b) 1   (c) 1.0   (d) 7.0

19. What is the value of this expression : 22% 3.0 is ?

    (a) 7   (b) 1   (c) 1.0   (d) 7.0

20. What is the output of this expression, 3*1**3 ?

    (a) 27   (b) 9   (c) 3   (d) 1

21. What is the value of this expression, 3**1**3 ?

    (a) 27   (b) 9   (c) 3   (d) 1

22. What is the value of this expression 3**3**1 ?

    (a) 27   (b) 9   (c) 3   (d) 1

23. What is the value of this expression, 3*3**1 ?

    (a) 27   (b) 9   (c) 3   (d) 1

24. What will be the value of the expression ?

       14 + 13 % 15

    (a) 14   (b) 27   (c) 12   (d) 0

25. Evaluate the expression given below if $A = 16$ and $B = 15$.

       A % B // A

    (a) 0.0   (b) 0   (c) 1.0   (d) 1

26. What is the value of x ?

       x = int(13.25 + 4/2)

    (a) 17   (b) 14   (c) 15   (d) 23

27. What is the value of the following expression ?

    $3 + 3.00, 3**3.0$

    (a) (6.0, 27.0)   (b) (6.0, 9.00)   (c) (6, 27)
    (d) [6.0, 27.0]   (e) [6, 27]

28. The expression 8/4/2 will evaluate equivalent to which of the following expressions :

    (a) 8/(4/2)   (b) (8/4)/2

29. What is the value of the following expression ?

    $21//4 + 6/3$

    (a) 7   (b) 7.0   (c) 7.25   (d) 7.33

30. What is the output of the following expression ?

    ```
    print(4.00/(2.0 + 2.0))
    ```

    (a) Error   (b) 1.0   (c) 1.00   (d) 1

31. Which of the following expressions involves coercion (implicit type promotion) when evaluated in Python ?

    (a) 5.3 + 1.8   (b) 9.9 * 4.1   (c) 4.5 % 3   (d) 7.1 – 3.6

32. What will be the output of the following expression ?

    $24//6\%3, 24//4//2, 48//3//4$

    (a) (1, 3, 4)   (b) (0, 3, 4)   (c) (1, 12, #error)   (d) (1, 3, #error)

33. Which among the following list of operators has the highest precedence ?

    $+, -, **, \%, /, <<, >>, |$

    (a) <<, >>   (b) **   (c) | (d) %

34. What is the output of the following expression ?

    ```
    float(5 + int(4.39 + 2.1)%2)
    ```

    (a) 5.0   (b) 5   (c) 8.0   (d) 8

35. Which of the following expressions is an example of type casting ?

    (a) 4.0 + float(6)   (b) 5.3 + 6.3   (c) 5.0 + 3   (d) int(3.1) + 7

36. Which of the following expressions results in an error ?

    (a) float('12')   (b) int('12')   (c) float('12.5')   (d) int('12.5')

37. List AL is defined as follows :

    ```
    AL = [1, 2, 3, 4, 5]
    ```

    Which of the following statements removes the middle element 3 from it so that the list AL equals [1, 2, 4, 5] ?

    (a) del a[2]   (b) a[2:3] = [ ]   (c) a[2:2] = [ ]
    (d) a[2] = [ ]   (e) a.remove(3)

38. Which of the following statement prints the shown output below ?

    ```
    hello\example\test.txt
    ```

    (a) print("hello\example\test.txt")   (b) print("hello\\example\\test.txt")
    (c) print("hello\"example\"test.txt")   (d) print("hello"\example"\test.txt")

39. Suppose s is assigned as follows :

    s = 'foobar'

    All of the following expressions produce the same result except one. Which one ?

    (a) s[: : -5]   (b) s[: : -1][: : -5]   (c) s[: : -1][-1] + s[len(s)-1]
    (d) s[0] + s[-1]   (e) s[: : 5]

40. Which two lines of code are valid strings in Python ?

    (a) This is a string   (b) 'This is a string'
    (c) (This is a string)   (d) "This is a string"

41. Which line of code has the correct syntax for the print statement ?

    (a) print(Its' a rainy day)   (b) Print('it's a rainy day')
    (c) print('it's a rainy day")   (d) print('it\'s a rainy day')

42. You have the following code segment:

    ```
    print("Here we have a line of text \n and \n we can do \newlines!")
    ```

    What is the output of this code ?

    (a)   Here we have a line of text and we can do newlines!

    (b)   Here we have a line of text and
          we can do newlines!

    (c)   Here we have a line of text
          and
          we can do
          newlines!

    (d)   Here we have a line of text
          and
          we can do
          ewlines!

43. Which value type does input( ) return ?

    (a) Boolean   (b) String   (c) Int   (d) Float

44. You have the following code segment :

    ```
    String1 = "my"
    String2 = "work"
    print(String1 , String2)
    ```

    What is the output of this code ?

    (a) my work   (b) work   (c) mywork   (d) my

45. You have the following code segment :

    ```
    String1 = "my"
    String2 = "work"
    print(String1 + String2)
    ```

    What is the output of this code ?

    (a) my work   (b) work   (c) mywork   (d) my

46. You have the following code segment :

```
String1 = "my"
String2 = "work"
print(String1 + String2.upper())
```

What is the output of this code ?

   (a) mywork   (b) MY Work   (c) myWORK   (d) My Work

47. Which code segment will output the number 20 to the console window ?

   (a)
```
myValue01 = "10"
myValue02 = "10"
myValue01 = myValue01 + myValue02
print(myValue02)
```

   (b)
```
myValue01 = 10
myValue02 = 10
myValue01 = myValue01 + myValue02
print(myValue01)
```

   (c)
```
MyValue01 = 10
myValue02 = 10
print(myValue01 + myValue02)
```

   (d)
```
MyValue01 = "10"
myValue02 = "10"
print(myValue01 + myValue02)
```

48. Which two operators can be used on numeric values in Python ?

   (a) @   (b) %   (c) +   (d) #

49. Given the numeric variable *Num1*, which lines of code properly prints the value ?

   (a) print("%d")   (b) print("%d", Num1)
   (c) print(Num1)   (d) print("%d Num1")

50. Which operator is used to check whether two variables are the same ?

   (a) –   (b) = =   (c) | (d) =

51. Which code segment will NOT reach its print( ) function ?

   (a)
```
if 'yes' != 'no' :
    print("condition met")
```

   (b)
```
if 'yes' != 'yes' :
    print("condition met")
```

   (c)
```
if not 'yes' == 'no' :
    print("condition met")
```

   (d)
```
If 'yes' == 'yes' :
    print("condition met")
```

52. Which line of code produces an error ?

   (a) "one" + 'two'   (b) 1 + 2   (c) "one" + "2"   (d) '1' + 2

53. What is the output of this code ?

```
>>> int("3" + "4")
```

   (a) "7"   (b) "34"   (c) 34   (d) 24

54. Which line of code will cause an error ?

```
1.    num = [5, 4, 3, [2], 1]
2.    print(num[0])
3.    print(num[3][0])
4.    print(num[5])
```

   (a) Line 3   (b) Line 2   (c) Line 4   (d) Line 1

55. What is the result of this code ?

```
def print_double(x) :
    print(2 ** x)
print_double(3)
```

   (a) 8   (b) 6   (c) 4   (d) 10

56. Which of the following four code fragments will yield following output ?

```
Eina
Mina
Dika
```

Select all of the function calls that result in this output

   (a)   print('''Eina

        \nMina

        \nDika''')

   (b)   print('''EinaMinaDika''')

   (c)   print('Eina\nMina\nDika')

   (d)   print('Eina

        Mina

        Dika')

57. Which of the following four code fragments will yield following output ?

```
Eina

Mina

Dika
```

Select all of the function calls that result in this output

   (a)   print('''Eina

        \nMina

        \nDika''')

   (b)   print('''EinaMinaDika''')   (c) print('Eina\nMina\nDika')

   (d)   print('Eina

        Mina

        Dika')

58. What will be the output of the following code ?   [Textbook Q. 8, Chapter 2 (Type B)]

```
tuple_a = 'a', 'b'
tuple_b = ('a', 'b')
print (tuple_a == tuple_b)
```

    (a) 0   (b) 1   (c) False   (d) True

59. What will be the output of the following code snippet ?   [TB Q. 9, Chapter 2 (Type B)]

```
rec = {"Name" : "Python", "Age":"20", "Addr" : "NJ", "Country" : "USA"}
id1 = id(rec)
del rec
rec = {"Name" : "Python", "Age":"20", "Addr" :"NJ", "Country" : "USA"}
id2 = id(rec)
print(id1 == id2)
```

    (a) True   (b) False   (c) 1   (d) Exception

60. If **return** statement is not used inside the function, the function will return :

    (a) 0   (b) None object   (c) an arbitrary integer

    (d) Error! Functions in Python must have a return statement.

                        [Textbook Q. 1, Chapter 3 (Checkpoint 3.1)]

61. Which of the following keywords marks the beginning of the function block ?

    (a) func   (b) define   (c) def   (d) function

                        [Textbook Q. 2, Chapter 3 (Checkpoint 3.1)]

62. What is the area of memory called, which stores the parameters and local variables of a function call ?   [Textbook Q. 3, Chapter 3 (Checkpoint 3.1)]

    (a) a heap   (b) storage area   (c) a stack   (d) an array

True/False Questions

63. Mathematical operations can be performed on a string.

64. The expression **int(x)** implies that the variable x is converted to integer.

65. The value of the expressions 4/(3*(2-1)) and 4/3*(2-1) is the same.

66. The value of the expressions 4/(3*(4–2)) and 4/3*(4–2) is the same.

67. The expression 2**2**3 is evaluated as: (2**2)**3.

68. Do both the following represent the same list".

```
['a', 'b', 'c']
['c', 'a', 'b']
```

69. A list may contain any type of objects except another list.

70. There is no conceptual limit to the size of a list.

71. All elements in a list must be of the same type.

72. A given object may appear in a list more than once.

73. The keys of a dictionary must be of immutable types.

74. A string can be surrounded by three sets of single quotation marks or by three sets of double quotation marks.

75. Variables can be assigned only once.

76. In Python, a variable is a placeholder for data.

77. You can combine a numeric value and a string by using the + symbol.

78. The clear( ) removes all the elements of a dictionary and also deletes the dictionary.

79. The clear( ) removes all the elements of a dictionary but does not delete the empty dictionary.

80. The max( ) and min( ) when used with tuples, can work if elements of the tuple are all of the same type.

81. A list of characters is similar to a string type.

82. For any index n, s[:n] + s[n:] will give you original string s.

83. A dictionary can contain keys of any valid Python types.

84. Non-default arguments can be placed before or after a default argument in a function definition.

85. A parameter having default value in the function header is known as a default parameter.

86. The first line of function definition that begins with keyword **def** and ends with a colon (:), is also known as function header.

87. Variables that are listed within the parentheses of a function header are called function variables.

88. In Python, the program execution begins with first statement of __main__ segment.

89. Default parameters cannot be skipped in function call.

90. The default values for parameters are considered only if no value is provided for that parameter in the function call statement.

91. A python function may return multiple values.

92. A void function also returns a value *i.e.,* **None** to its caller.

93. Variables defined inside functions can have global scope.

94. A local variable having the same name as that of a global variable, hides the global variable in its function.

95. A Python module has the .py extension.

Fill in the Blanks

96. The file _____ must be part of the folder holding library files and other definitions in order to be treated as importable package.

97. The smallest individual unit in a program is known as a _____ .

98. A token is also called a _____ .

99. A _____ is a word having special meaning and role as specified by programming language.

100. Lists are _____ types of Python as you can change its values in place.

101. The data types whose values cannot be changed in place are called _____ types.

102. In a Python expression, when conversion of a value's data type is done automatically by the compiler without programmer's intervention, it is called _____ .

103. The explicit conversion of an operand to a specific type is called _____ .

104. The _____ statement is an empty statement in Python.

105. A _____ statement skips the rest of the loop and jumps over to the statement following the loop.

106. The _____ statement skips the rest of the loop statements and causes the next iteration of the loop to take place.

107. A _____ is a subprogram that acts on data and often returns a value.

108. Python names the top level segment (main program) as _____ .

109. In Python, program execution begins with first statement of _____ segment.

110. The values being passed through a function-call statement are called _____ .

111. The values received in the function definition/header are called _____ .

112. A parameter having default value in the function header is known as a _____ .

113. A _____ argument can be skipped in the function call statement.

114. _____ arguments are the named arguments with assigned values being passed in the function call statement.

115. A void function also returns a _____ value to its caller.

116. By default, Python names the segment with top-level statements (main program) as _____ .

117. The _____ refers to the order in which statements are executed during a program run.

118. The default value for a parameter is defined in function _____ .

119. A _____ refers to a collection of modules that together cater to specific type of needs or applications.

120. A Python _____ is a file (.py file) containing variables, class definitions, statements and functions related to a particular task.

ANSWERS

Multiple Choice Questions

1. (a) 2. (b) 3. (a) 4. (b) 5. (b) 6. (d)

7. (d) 8. (a) 9. (a), (c)

10. (i) (b) NameError (apple not defined earlier) ; (ii) (a) SyntaxError ; (iii) (d) TypeError ;
    (iv) (b) NameError (a12 not defined) ; (v) (c) ValueError

11. (a) 12. (a) 13. (d) 14. (d) 15. (c), (d) 16. (b)

17. (b) 18. (b) 19. (c) 20. (c) 21. (c) 22. (a)

23. (b) 24. (b) 25. (b) 26. (c) 27. (a) 28. (b)

29. (b) 30. (b) 31. (c) 32. (a) 33. (b) 34. (a)

35. (*a*), (*d*)	**36.** (*d*)	**37.** (*a*), (*b*), (*e*)	**38.** (*b*)	**39.** (*a*)	**40.** (*b*), (*d*)
41. (*d*)	**42.** (*d*)	**43.** (*b*)	**44.** (*a*)	**45.** (*c*)	**46.** (*c*)
47. (*b*)	**48.** (*b*), (*c*)	**49.** (*c*)	**50.** (*b*)	**51.** (*b*)	**52.** (*d*)
53. (*c*)	**54.** (*c*)	**55.** (*a*)	**56.** (*c*)	**57.** (*a*)	**58.** (*d*)
59. (*b*)	**60.** (*b*)	**61.** (*c*)	**62.** (*c*)		

True / False Questions

63. F	**64.** T	**65.** T	**66.** F	**67.** F	**68.** F
69. F	**70.** T	**71.** F	**72.** T	**73.** T	**74.** T
75. F	**76.** F	**77.** F	**78.** F	**79.** T	**80.** T
81. F	**82.** T	**83.** F	**84.** F	**85.** T	**86.** T
87. F	**88.** T	**89.** F	**90.** T	**91.** T	**92.** T
93. F	**94.** T	**95.** T			

Fill in the Blanks

96. __init__.py

97. Token   **98.** lexical unit   **99.** keyword

100. Mutable

101. Immutable   **102.** implicit type conversion

103. type casting   **104.** pass   **105.** break   **106.** continue

107. Function   **108.** __main__   **109.** __main__

110. arguments/actual parameters/actual arguments

110. parameters/formal parameters/formal arguments

112. default parameter   **113.** default   **114.** Keyword   **115.** None

116. __main__   **117.** Flow of Execution   **118.** header

119. library   **120.** module